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TITLE: CBN CUTTING TOOL FOR HIGH-
GRADE, HIGH-EFFICIENCY
MACHINING

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ABSTRACT:

CHG DATE=20071130 STATUS=O>It is an object to provide a CBN cutting tool using cBN-based sintered bodies which shows high resistance to

chipping even when a hard ferric workpiece which is difficult to cut is cut at a high feed rate for high-speed, high-efficiency machining, and which can provide a machined surface that shows superior surface roughness, and improved fatigue life and sealability. A cBN-based sintered body of a cutting tip has an arcuate nose 5, a rake face 6, flanks 7 and a negative land 9. One of the cutting edges 10 defined between the negative land 9 and the flanks 7 that serves as an end cutting edge forms an inclination angle γ of not less than 20 degrees and not more than 35 degrees with respect to the rake face. Further, the cutting edges 10 are positioned such that they are the lowest at the apex P of the arcuate nose and gradually rise from the apex P toward two points Q1 and Q2, respectively.